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09/986,411	11/08/2001	Naoto Iwakiri	Q67065	5218

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SUGHRUE, MION, ZINN, MACPEAK & SEAS  
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EXAMINER


GAGLIARDI, ALBERT J

ART UNIT PAPER NUMBER

2878

DATE MAILED: 01/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 09/986,411	Applicant(s) IWAKIRI, NAOTO	
	Examiner Albert J. Gagliardi	Art Unit 2878	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 29 December 2003.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19, 22, 23, 25, 26 and 28 is/are rejected.
- 7) ☒ Claim(s) 20, 21, 24 and 27 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All   b) ☐ Some \*   c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                  | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Specification*

1. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 9-12, 29-36 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Leblans *et al.* (US 6,528,812) in view of Jeromin *et al.* (US 5,661,309).

Regarding claim 1, *Leblans* discloses (Figs. 1-3) a cassette (22) for storing a stimulable phosphor sheet (23) used for recording a radiation image therein, the cassette comprising: an emitter for emitting erasing light (20); and the system further comprising a power supply for causing the emitter to emit erasing light and a control circuit for controlling a time of emission from the emitter (inherent).

Regarding the relative location of the power supply and the control circuit, the examiner notes that while *Leblans* does not specifically disclose the location of such components, those skilled in the art appreciate that it is known in the art to produce radiation images using "self-contained" x-ray imaging cassette (see for example *Jeromin* (abstract, Fig. 1)) wherein the cassette is arranged to include an internal power supply and a central process controller unit for

powering and controlling operation of the system (col. 3, lines 48-63; col. 4, lines 2-3). *Jeromin* teaches that such an arrangement allows the cassette to be used independently of external power sources and to be easily transportable (col. 4, lines 3-6). Therefore, absent some degree of criticality, the specific location of the control circuit and the power supply as being located within the cassette would have been a matter of routine design choice within the skill of a person of ordinary skill in the art so as to allow for a self-contained unit that is easily transportable.

Regarding claim 9, *Jeromin* discloses that the power supply may comprise a battery (col. 4, lines 2-4).

Regarding claim 10, absent some degree of criticality, the particular type of battery is viewed as a matter of routine design choice within the skill of a person of ordinary skill in the art depending on the needs of the particular application.

Regarding claim 11, the use of a recharging means for recharging batteries is well known and considered an obvious design choice depending on the need of the particular application.

Regarding claim 12, *Leblans* discloses that the emitter comprises an organic electroluminescence material (col. 3, lines 62-67).

Regarding claims 29 and 30, *Leblans* discloses that the emitter has a surface area substantially equal to the surface area of the stimuable phosphor sheet (col. 2, lines 62-65) and that the emitter is a thin (i.e., a film) organic EL material (col. 2, lines 49-50) which is the same material identified by applicant. As such, the claimed property of flexibility is *prima facie* considered and inherent or obvious property of the emitter (see MPEP 2112.01).

Regarding claims 31-34, a wide variety of batteries including thin, flexible, Lithium batteries. Those skilled in the art also appreciate that such batteries are well known and

considered desirable for use in portable equipment. Therefore, absent some degree of criticality, it would have been an obvious design choice within the skill of a person of ordinary skill in the art to modify the device suggested by *Leblans* and *Jeromin* so as to utilize any of the well known and functionally equivalent batteries such as a thin, flexible Lithium battery in view of the well known desirability of such batteries for use in portable equipment and depending on the needs of the application. Arranging the battery to be coplanar with the emitter and the phosphor sheet would have been an obvious design choice in view of planar design of the cassette, phosphor sheet, and emitter as suggested by *Leblans* and *Jeromin*.

Regarding claims 35 and 38, the provision of a closeable opening in stimuable phosphor cassette for removing the contents (such as a stimuable phosphor sheet) is well known and viewed as an obvious, if not inherent, design choice within the skill of a person of ordinary skill in the art so as to allow for repair, replacement, or further processing of parts. The use of hinges is a well known and considered a functionally equivalent design choice attaching the closable opening (i.e., lid).

Regarding claim 36, absent some degree of criticality, the particular location of the power supply is considered as a matter of routine design choice within the skill of a person of ordinary skill in the art.

4. Claims 2-5, 22, 25 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Leblans* and *Jeromin* as applied above, and further in view of *Kulpinski* (US 5,627,381).

Regarding claim 2, an inherent aspect of the system suggested by *Leblans* and *Jeromin* is that the control circuit controls the time of the emission. Regarding the source of information for controlling of the time of information, *Kulpinski* discloses (Fig. 5) a system for optimizing the

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erase time of a storage phosphor sheet on the basis of a variety of information i.e., a patient exposure index, for example), wherein the information is input from a source external to the erase control circuit (314) such as from a bar code reader (302), an x-ray measurement device (304) or an x-ray exposure detector (col. 3, line 64 to col. 4, line 27). Therefore, it would have been obvious to a person of ordinary skill in the art to modify the device suggested by *Leblans* and *Jeromin* such that the control circuit controls the time of the emission based on information input from outside thereof so as to allow for a cassette wherein the erase time is optimized.

Regarding claims 3-5, absent some degree of criticality, the particular location from which the control information is derived is viewed as a matter of routine design choice that does not affect the structure of the apparatus.

**Note:** Apparatus claims must be structurally distinguishable from the prior art. Claims directed to apparatus must be distinguished from the prior art in terms of structure rather than function. *In re Danly*, 263 F.2d 844, 847, 120 USPQ 528, 531 (CCPA 1959). Apparatus claims cover what a device is, not what a device does. *Hewlett-Packard Co. v. Bausch & Lomb Inc.*, 909 F.2d 1464, 1469, 15 USPQ2d 1525, 1528 (Fed. Cir. 1990). See MPEP 2114.

Regarding claim 22, absent some degree of criticality, those skilled in the art appreciate that it would have been obvious to a person of ordinary skill in the art to modify (if not inherent) an image photographing apparatus using the cassette suggested according to claim 3 above to include a means for inputting information relating to the dosage so as to allow for optimization of the erase time.

Regarding claim 25, absent some degree of criticality, those skilled in the art appreciate that it would have been obvious to a person of ordinary skill in the art to modify (if not inherent)

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an information registration apparatus using the cassette suggested according to claim 4 above to include a means for inputting information relating to the dosage so as to allow for optimization of the erase time.

Regarding claim 28, absent some degree of criticality, those skilled in the art appreciate that it would have been obvious to a person of ordinary skill in the art to modify (if not inherent) an information reading apparatus using the cassette suggested according to claim 5 above to include a means for inputting information relating to the dosage so as to allow for optimization of the erase time.

5. Claims 6-8, 16, 18-19, 23, 26 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Leblans*, *Jeromin* and *Kulpinski* as applied above, and further in view of *Ivan et al.* (US 5,877,501).

Regarding claim 6-8, *Leblans* suggest that the system includes a means for (29) for communicating information. *Ivan* discloses that such means may, in functionally equivalent alternative embodiments, include a terminal, a radio reception means or and infrared reception means, the choice of which would have been a matter of routine skill in the art depending on the needs of the particular application.

Regarding claim 16, *Ivan* discloses that it is routine in the art to include a display (40) for indicating the status of the radiation imaging device. Absent some degree of criticality, the particular indication provided is viewed as a matter of routine design choice.

Regarding claims 18-19, *Ivan* discloses that it is routine in the art to include a display (40) for indicating the status of the radiation imaging device. Status indications such as “ready” and/or “standby” are well known and considered routine. As such, absent some degree of

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criticality, the particular indication provided (such as a “ready” or “standby” status) is viewed as a matter of routine design choice.

Regarding claim 23, absent some degree of criticality, those skilled in the art appreciate that it would have been obvious to a person of ordinary skill in the art to modify (if not inherent) an image photographing apparatus using the cassette suggested according to claim 18 above to include a detection means for detecting the status thereof so as to allow optimal use of the specific features of the cassette.

Regarding claim 26, absent some degree of criticality, those skilled in the art appreciate that it would have been obvious to a person of ordinary skill in the art to modify (if not inherent) an information registration apparatus using the cassette suggested according to claim 18 above to include a detection means for detecting the status thereof so as to allow optimal use of the specific features of the cassette.

Regarding claim 37, absent some degree of criticality, the particular location of the electrical contact is considered as a matter of routine design choice within the skill of a person of ordinary skill in the art.

6. Claims 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Leblans* and *Jeromin* as applied above, and further in view of *Mueller et al.* (US 6,373,074).

Regarding claims 13-15, although *Leblans* and *Jeromin* do not specifically disclose the side on which the stimuable phosphor is formed and/or the relative side of the sheet on which the erasing lamp is located, those skill in the art appreciate that it is well known to locate the erasing lamp on either side (or both) of the sheet depending on the particular needs of the application (see for example *Mueller* at Figs. 1 and 6). The use of a transparent substrate would



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have been an obvious (if not inherent) design choice when the erasing lamp is located on the substrate side of the sheet.

7. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over *Leblans* and *Jeromin* as applied above, and further in view of *Ohgoda et al.* (US 6,373,074).

Regarding claim 17, the use of an elapsed time indication and re-erasing means is well known (see for example *Ohgoda* - abstract). Therefore, absent some degree of criticality, the inclusion of an elapsed time indicator and re-erasing means would have been a matter of routine design choice within the skill of a person of ordinary skill in the art depending on the needs of the particular application and the desire for improved imaging.

#### ***Response to Arguments***

8. Applicant's arguments filed 24 November 2003 have been fully considered but they are not persuasive.

9. Regarding applicant's argument that the *Leblans* and *Jeromin* do not suggest a control circuit for controlling a time of emission from an emitter because the erasing control circuit suggested by *Jeromin* does not control an emitter. This argument is not convincing. The examiner notes that the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). The examiner notes that, as applied above, the control circuit controlling the emission of an emitter and a power supply are suggested by *Leblans*. *Jeromin* is merely cited for the obviousness of locating "a" control circuit

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and power supply internal to a cassette, not for the suggestion to bodily incorporate “the” particular control circuit and power supply disclosed by *Jeromin*.

10. Regarding applicant’s argument that *Jeromin* fails to state that the battery is a “rechargeable” battery, the examiner notes that the standard for obviousness is not an *ipsissima verba* test, but rather what the combined teachings of the references would have suggested to those of ordinary skill in the art. In this case, “rechargeable” batteries are of such notoriously well-known character that, notwithstanding a specific statement to the contrary, one skilled in the art would immediately recognize the disclosure of a “battery” to include batteries of the “rechargeable” type. In regards to applicant’s statement that there it would not be obvious to include a means to recharge the battery because *Jeromin* states that the external power is for “operating power” and therefore teaches away from using an external connection to charge the battery, the examiner notes that passage referred to by applicant (col. 5, lines 49-57) is for an alternate, “lower cost” device which does not include a battery and, therefore does not teach away from using a external connection to charge the battery but, instead, actually suggests the inherency of such a connection. Regardless of whether or not such connection is inherent, the examiner reiterates that the use of an electric connection to allow for recharging of batteries is well known (which has not been challenged by applicant) and would have been an obvious design choice.

11. Applicant's arguments that *Kulpinski* and *Ivan* fail to make up for deficiencies of *Leblans* and *Jeromin* is moot since the examiner does not agree that there are deficiencies. Additionally, the examiner notes that the arguments fail to comply with 37 CFR 1.111(b) because they amount

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to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

12. Regarding applicant's argument that claim 16 is patentable because it is not known in the art to indicate whether or not the emission from the emitter is going on or is completed, the examiner notes that *Jeromin* (col. 5, lines 1-4) suggest the use of a display means (66) for indicating that erasing has completed. One skilled in the art would readily comprehend that, in the suggested device, an indication that the panel has been erased is an indication that the emission from the emitter (i.e., the erasing process) is completed.

13. Regarding applicant's argument that claim 18 is patentable because the references fail to teach or suggest motivation for a warning means, the examiner notes that the condition of a ready light (see *Jeromin*) as being inactive is inherently a warning indication. The indication, *ispro facto*, suggests motivation for having an indication.

14. Applicant's arguments that *Mueller* fail to make up for deficiencies of *Leblans* and *Jeromin* is moot since the examiner does not agree that there are deficiencies. Additionally, the examiner notes that the arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

15. Regarding applicant's argument that claims 14 and 15 are patentable because there was no specific recitation of a motivation for arranging the phosphor sheet and erasing light in any one of the well known functionally equivalent configurations as suggested by *Mueller*, the examiner notes that an express suggestion to substitute one equivalent component or process for

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another is not necessary to render such a substitution obvious. *In re Fout*, 675 F.2d 297, 213 USPQ 532 (CCPA 1982). See MPEP 2144.06.

16. Applicant's arguments that *Ohgoda* fails to make up for deficiencies of *Leblans* and *Jeromin* is moot since the examiner does not agree that there are deficiencies. Additionally, the examiner notes that the arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

17. Regarding newly submitted claims 29-38, applicant's failure to indicate reasons as to why the newly added claims are allowable over the references cited (as required by 37 CFR 1.111 and MPEP 714.02) is considered an admission by the applicant that the newly submitted claims are not separately patentable.

18. All of applicant's arguments having been addressed, the rejection is maintained.

***Allowable Subject Matter***

19. Claims 20-21, 24 and 27 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

20. The following is a statement of reasons for the indication of allowable subject matter:

Regarding dependent claim 20, the prior art (*Leblans*, for example) does not disclose or fairly suggest a cassette including an erasing means wherein, as specifically claimed, and wherein the cassette further includes an emission stopping means for stopping the emitter if the emitter is still emitting when information indicating that the cassette is in the photography standby state is input thereto.

The remaining claims would be allowable on the basis of their dependency.

***Conclusion***

21. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

22. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

23. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Albert J. Gagliardi whose telephone number is (703) 305-0417 (after January 20, 2003, the new number will be (571) 272-2436. The examiner can normally be reached on Monday thru Friday from 9 AM to 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David P. Porta can be reached on (703) 308-4852. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9318.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.



Albert J. Gagliardi  
Primary Examiner  
Art Unit 2878

AJG